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The Stability of Prices,

— BY —

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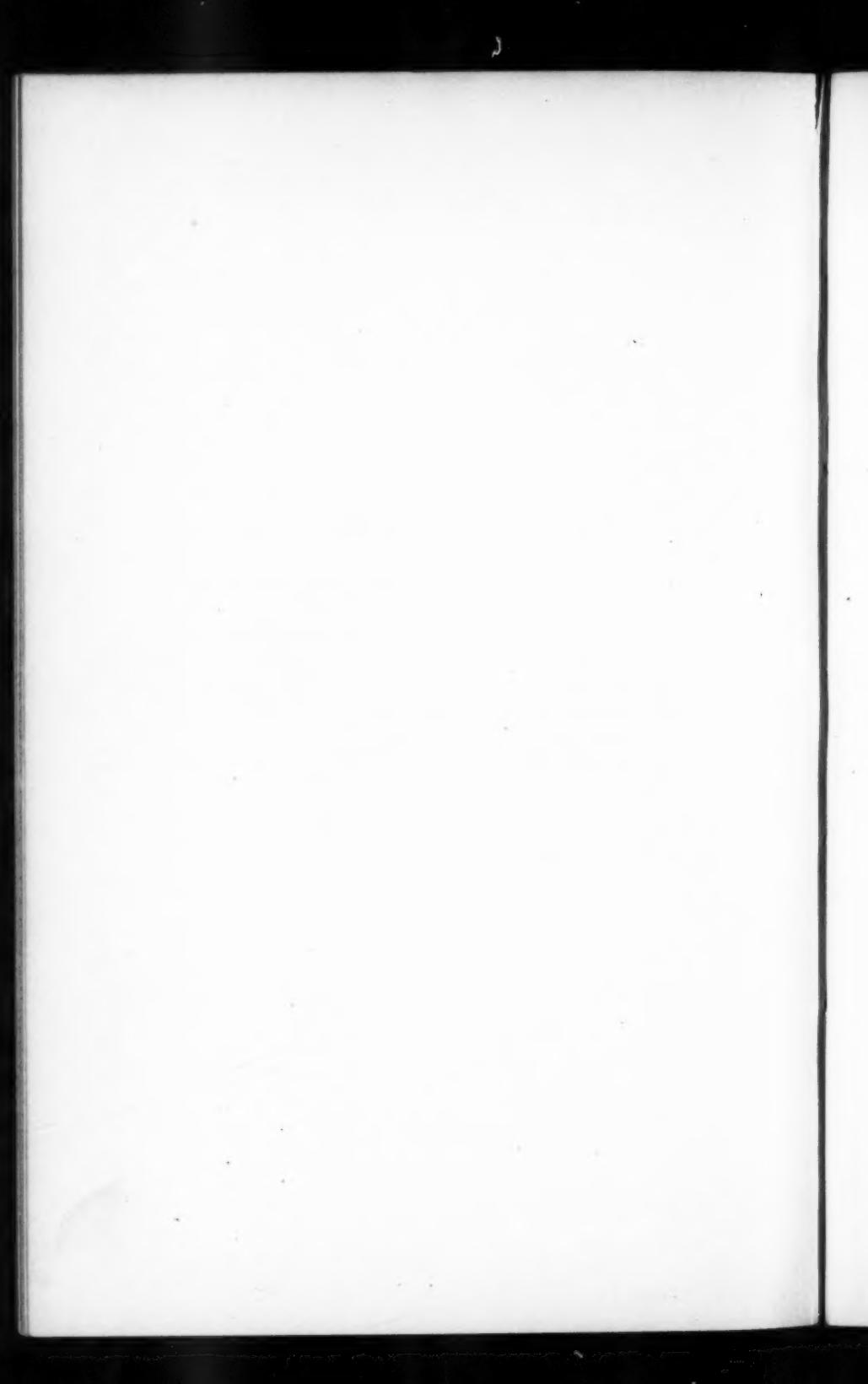
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THE STABILITY OF PRICES.

SECTION I.

PHYSICAL CONDITIONS MAKING PRICES STABLE.

Among the economic phenomena of the present age, nothing has attracted more attention than the frequent changes to which the values of most commodities are subject. In the good old times in which the economists of the preceding generation lived, and from which they drew their economic illustrations and ideas, these changes seldom occurred, and when they did take place were very limited in extent, and came so slowly into effect as to attract no attention. All the common articles of consumption had fixed prices which often did not change for a lifetime, and if any dealer had attempted to charge more than custom demanded, it would have attracted the attention and aroused the indignation of the whole community. These conditions have been so altered that to-day a merchant must consult his paper each day before he can know where to purchase a stock at the best advantage. The consumer also must be on his guard or he will pay too much for his sugar or flour. Dress goods and clothing, even at retail, fluctuate so rapidly in value that a study of advertisements is essential to a careful purchaser.

If economists are asked to explain the cause of the sudden changes in value to which all commodities

are at present subject, the usual reply is that there has been an over-production. But why should we be more liable to over-production than our grandfathers were? Surely there must be a great change in our economic conditions to produce so great an effect, and if our economic conditions are based on natural laws during the present century, our relations to nature must have changed in some important respect to produce so great an effect on the stability of prices. Let us, therefore, seek to discover what natural conditions favor a stability of prices, and see if we can find a solution of this great problem in the modifications of our physical surroundings, which recent progress has occasioned.

That social state in which the Ricardian theory of rent is true, affords the best example of a stability of prices caused by natural conditions. Suppose there be three tracts or grades of land in use upon which the cost of producing wheat is fifty, sixty and seventy cents a bushel respectively, and that the gross produce of each tract is equal to one-third of the whole. If the price of wheat fell below seventy cents a bushel the third grade of land would go out of cultivation, and the amount of wheat produced would fall off one-third. So great a reduction in the quantity produced would cause a reaction in the price of wheat, and it would rise again to seventy cents or more. The price of wheat, however, could not rise much above seventy cents if, as Ricardo supposes, there is a fourth tract of land of a considerable extent upon which the cost of cultivation is a little greater than upon the poorest land in use. Under these conditions the price of wheat would be very stable, and would not vary much from seventy cents.

If, however, we change the conditions of our supposition, the result will be very different. Suppose upon nine-tenths of the land wheat was raised at a cost of production of but fifty cents a bushel, and that on the other tracts of land the cost of production increased gradually from fifty cents to ninety cents a bushel. Under these conditions there would be so small a change in the gross production of wheat, when its price rose, that we could not be certain that the small increase of wheat would counteract the social causes which raised its price. On the other hand, when the price of wheat began to fall, the probability is that the decrease of the supply of wheat would not be large enough to check the fall in price before it reached fifty cents a bushel. Fifty cents a bushel would be the limit below which the price of wheat could not remain for any considerable period of time, since nine-tenths of the wheat has this cost of production. How high the price of wheat might rise could not be determined from the physical conditions alone, and there would be no normal price from which the market price would fluctuate but little. Every change, whether social or physical, would have a great effect on the price of wheat, and as a result the market price would fluctuate rapidly and to a great extent.

If we compare these two widely differing suppositions, concerning the physical conditions determining the price of wheat, an important conclusion can be drawn as to the natural causes which make the price of produce stable. If the different grades of land used by an isolated nation can raise about the same amount of produce, then there will be a normal price of produce, and the market price will be very stable.

On the other hand, if a nation has so much of some one grade of land that almost the entire crop can be raised on the land of this grade, then there will be no normal price of produce, and the changes in price will be sudden and great. We can then have one nation in which natural causes will determine the price of produce and keep it stable, while in a neighboring nation, where most of the land has the same fertility, there will be no normal price of produce, and a great liability to rapid fluctuations in its value. The same nation, moreover, at one period in its history, can have many grades of land producing about equal produce, while at a subsequent time, through social causes, the produce of all the land may have about the same cost of production. During the first period we should expect to find the price of produce stable, while during the second period it would be a matter of surprise if there were no sudden changes of great extent.

Production of food does not furnish the only examples of the law which I am illustrating. Just as good examples can be obtained from other industries. In one social state all the producers of a given article of commerce may be so located that there is little or no difference in the efficiency of their labor, while in another social state the different producers may vary widely as to the efficiency of their labor. During the last century it seldom happened that many of the producers of any article were at the same place, or under the same social or physical conditions. The different centres of trade were small and without ready means of communication, the one with the other. The cost of transportation was great and commerce was in-

secure, while traveling was often perilous. These circumstances, combining with many others which might be mentioned, caused the different portions of each article of trade to have different costs of production, and as the scale of production was everywhere very limited, no one center of trade could produce enough to supply the market and displace their competitors, who produced at a greater cost of production. In our present social state all this is changed. A slight difference in the cost of production is now usually sufficient entirely to displace the producer who labors at a disadvantage, and the scale of production is so large that the most efficient centers can furnish more than the world needs of any article of trade. Commerce is so secure, and the cost of transportation has been so reduced, that most producers on a large scale can compete with success on any of the world's markets. When these two social states are compared it must be readily perceived that our ancestors were surrounded by natural and social conditions which kept prices stable, while we have lost most of these conditions by agricultural improvements, and by those changes which have brought about a more equal efficiency of labor among producers. In former times the great difference in the efficiency of labor among producers caused the order in which the different producers would cease to compete as the price of any commodity fell, to be nearly as certain as was the order in which the land went out of cultivation when the price of produce fell. Hard times seriously affected only those whose efficiency was the least, while the other producers were protected from heavy losses by the reaction in

prices which was sure to take place when a few producers ceased to compete. In such a social state the suffering of the few protected the many, and the nation could prosper without governmental interference. With us, however, when all the producers have an equal efficiency of labor, there is no one portion of the producers on whom the results of falling prices first come. Every producer is affected at the same time, and in a like degree, and each one suffers as much as did the least efficient portion of the producers of the last century, and no one has that protection which in former times natural conditions afforded to the greater part of the producers.

I do not wish to infer that at the present time natural conditions afford us no protection. I only desire to point out the real conditions of stable prices, and to show why the natural conditions of stable prices decrease as the relative quantity of good land increases. If the reader clearly perceives the two extreme possibilities he can more correctly judge what are present actual conditions. Picture on the one hand a nation where, all the land being of equal fertility, no land will go out of cultivation as the price of food rises or falls. On the other hand, picture a nation where the land has many different grades of fertility, no one grade being of a much greater extent than the others. Let the social conditions of the first nation be such as to favor a production on a large scale, and to give an equal efficiency of labor to each producer, while in the second nation the scale of production is small, and the different producers vary widely in the efficiency of their labor. Under these conditions the second nation

would have very stable prices, and each article of commerce would have a normal value from which the market value would differ but little. The industrial condition, however, of the first nation would be widely different from that of the second nation. There would be no natural order in which the different tracts of land would go out of cultivation as the price of food fell, nor would natural conditions determine which of the different producers would first cease to produce as the value of their products was reduced. Every changing circumstance, however unimportant, would have effect on prices. A slight deficiency or excess in the price of any commodity, a change in the weather affecting crops, the actions of Congress, a railroad war, a bank failure, or any of a multitude of like circumstances, might set a series of causes at work that would so disturb all commercial circumstances as to throw the whole nation into distress.

Nor is this the only difference between the two nations. When wages and profits are fixed by natural circumstances, and prices are stable through the presence of a large quantity of land at the margin of cultivation, we can know that the surplus revenue above the amount of profits and wages goes as rent to the landlords. It is certain who will get each portion of what is produced, even if the natural distribution does not correspond to our ethical ideas. This certainty as to the distribution of wealth disappears when all producers have an equal efficiency of labor and there is no land at the margin of cultivation. Suppose that in a section, distant from the seaboard, the cost of production for wheat was fifty cents a bushel, the cost of transportation ten cents and the

market price was seventy cents a bushel. The railroad company could raise the rates of transportation from ten cents, its real cost, to twenty cents, and thus divert the ten cents a bushel from the pockets of the farmers to the treasury of the company. Nor would the farmers have any natural protection if the cost of production did not exceed fifty cents a bushel. If the railroad company did not do this, or did it but partially, any other combination of capital could do it. Through a combination the price of nails, cloth or coal could be raised, and the farming classes would not be protected by natural causes until the whole of the surplus—ten cents a bushel—was absorbed by those acting in these combinations.

The owners of good land have, by themselves, no natural protection. Their only protection consists in the presence of a large tract of land at the margin of cultivation, which would go out of cultivation if the price of food was reduced. When, however, there is no land at the margin of cultivation, or only so small a tract that it cannot cause a reaction in the price of food if it is not cultivated, then land owners have no means of protection, and it is more probable that the surplus revenue should find its way into the treasury of some combination of capital than that the land owners should retain it.

The Ricardian theory of rent has two sides. The strong side is presented when it is asserted that the best land will be first cultivated, and that the poorer lands will be brought into use only as the price of food rises. We see the weak side, however, when it is asserted that the order in which land goes out of cultivation as the price of food falls, is exactly the reverse of the order in which it came into cultiva-

tion. If one tract of land can be brought into cultivation when the price of wheat is fifty cents a bushel, while the natural conditions of another tract require a price of fifty-five cents a bushel before it can be brought into cultivation, it accords with common experience that the first tract will be cultivated before the second. There is no such experience, however, to prove that the tract whose natural conditions demand that the price of wheat be fifty-five cents a bushel before it can be brought into cultivation, will be thrown out of cultivation if the price of wheat should fall again to fifty cents a bushel. Before we can determine what will be the price at which this land will go out of cultivation, we must consider all the social causes which begin to operate as soon as the land is once cultivated. The greater part of the newly cultivated land is esteemed poor land, not from any lack of fertility, but because its situation is distant from the large centers of production and population. A few generations, however, are usually sufficient to establish new centers of industry in the newly cultivated regions, and then these lands, through a better distribution of population, become as valuable as those of the older settled regions. Many tracts of land are esteemed poor when first cultivated, because of the great obstacles to cultivation, which can be removed only by the use of capital. Ditches must be dug, stones and timber must be removed, and often the soil is so deficient in some respect that it can become valuable only through artificial fertilization. When these expenditures are once made improved lands are as productive as those having a natural fertility, and they can be cultivated with profit, even if the price of food is

reduced. Of equally great importance in reducing the quantity of poor land are those changes in the demand for food which allow each tract of land to be used for those crops for which it is best fitted. When the diet of a nation is composed chiefly of bread, meat, potatoes, rice, or any other one or few articles of food, all the land of this nation must be used for the production of the few crops which are in demand. Large tracts of land will not have the soil or climate suited to these crops, and they will have little or no value until some change in the demand for food creates a desire for those articles for which they are fitted. Such changes often occur, either through the desire of the people for a more varied diet, or from the introduction of some new crop fitted for animal food. Even mere mechanical inventions have often changed our estimate of large tracts of land, causing what was formerly regarded as poor land to become good land. The invention of the cotton gin made the cultivation of cotton profitable on the upland regions of the Southern States, and thus changed large tracts of poor land into good land. A still more important change has been made by the introduction of railroads and of improved farm machinery into the great corn regions of Illinois and the neighboring states. Previous to these events wheat was the main crop, and for it the land was so poorly fitted that not half of the land could be cultivated, and even on this half the crop was often a failure. Now the cultivation of wheat has almost ceased. It is an article of import and not of export, as was formerly the case. At the present time, with corn as the leading crop, those tracts of land which were cultivated when wheat was the

main crop, are usually less valuable than are the lands which could not be cultivated so long as there was a demand for wheat only. These social causes so radically change our estimate of cultivated land that its cultivation would continue even if a large permanent reduction in the price of food should be made.

The foregoing facts clearly show the weak side of the Ricardian theory of rent, and unfortunately for the theory, it is from the weak side, and not from the strong side, that most of those conclusions are drawn which have made the theory so famous. When Ricardo seeks to show that a tax on corn will not reduce rent but will raise the price of corn, he does not prove his case by showing the order in which land will come into cultivation as the price of corn rises. He seeks to prove his case by asserting that there is a tract of land at the margin of cultivation, which will go out of cultivation if the price of corn does not rise enough to compensate for the tax. He thus appeals to the weak side of his theory, as do most of the arguments based on his theory of rent. In his writings, and those of his followers, we continually read of land being thrown out of cultivation, but we seldom read of the order in which land comes into cultivation, except in those chapters where they seek to prove the theory. There they prove the one side of the theory, and in the following chapters draw their conclusions from the other side. These conclusions are, therefore, true only of the earlier stages of social development, when there are yet large tracts of poor land at the margin of cultivation. So long as this is the case land owners, aided by nature, are stronger than any combinations of capital

can be, and they may look with ease while the other capitalists and laborers struggle for the mastery. As soon, however, as the results of progress change these poor tracts into good ones, the land-owners are much weaker than they were in the earlier stages of progress, when they were aided by the presence of large tracts of poor land. When these tracts of poor land disappear prices are no longer stable. It is now largely a question of power which of the contending classes shall possess that surplus revenue which a large margin of fluctuation in prices leaves without natural conditions to determine in what manner it shall be distributed.

SECTION II.

NO-RENT LANDS.

A correct appreciation of the importance of no-rent lands cannot be over estimated. So many related theorems are determined by the solution of this problem that it is necessary to investigate it carefully from every possible point of view. It has been urged to support the existence of no-rent lands that though large permanent improvements may remove certain tracts of land so far from the margin of cultivation, that even an extensive fall in the price of food cannot throw them out of cultivation, yet there are other tracts not capable of improvement which would go out of cultivation, and thus the Ricardian principle would hold true that with each increase of the price of food, the margin of cultivation would be advanced, while with each fall in price it would recede. With an increasing demand for food, a swamp would be

drained or a plain irrigated, and with a fall in price some barren hill-side or half arid stretch would be abandoned.

I cannot admit that the latter result would follow in any case in actual life. It would be true only in a hypothetical case, such as Ricardo is fond of using, but which has never been realized in any civilized state. It is also highly improbable that any early stage of human development would afford conditions suited to realize it. If, as Ricardo is fond of supposing, all the land was used for one crop, say wheat, then land might be thrown out of cultivation when the price of food falls. There are many soils poorly adapted to the growth of wheat, and only a high price of this article will enable wheat to be cultivated on them at a profit. Some such lands would cease to be cultivated for wheat if its prices fell, but that affords no ground for the opinion that in the actual conditions of civilized life they could be put to no use for which they would yield a rent to their owner. It is essential to a clear perception of the no-rent problem that the conception of land as fitted for one crop only, should be discarded. This is hard for any one to do who has been educated in the Ricardian economics. A clearly perceived, though false hypothesis like Ricardo's, biases the mind and prevents the perception of other more complicated hypotheses that conform more closely to natural conditions by which we are actually surrounded. The cultivation of new and richer lands caused by the draining of some swamp, would doubtless cause the owner of a hill-side to change the crops for which he had formerly used it, but I see no reason why he should abandon it as a Ricardian would assert. Hill-

sides are fitted for crops for which the fertile plains are not adapted. Potatoes, for example, are more productive and of a better quality when raised on a hill-side than on the richest plain. The owners of the most fertile plains of Illinois find it profitable to get their potatoes from Wisconsin hills. Eastern cities get most of their potatoes not from fertile plains, but from some of the most hilly and rocky regions in their vicinity. In many parts of the west, hills sloping to the north are best adapted for fruit and trees, and are highly esteemed on that account. Grapes also grow best on hill sides. The banks of the Rhine are so steep as to be useless for ordinary cultivation, yet they have a higher value than the adjacent fertile plains, because of their adaptability to the culture of the grape. Sandy half arid stretches have also crops for which they are especially fitted. The increase in market gardening in New Jersey has converted many sections formerly so barren that only a few stunted trees would grow on them, into the best of land. As an example of a marvelous change, consider the growth and development in the neighborhood of Vineland. Large sections of Hanover were formerly so barren that at first only buckwheat could be grown, yet from this small beginning they have been converted by their industrious owners into fertile lands. The conversion of poor land into good land is merely a question of a demand for some crop for which it is fitted. With this beginning, time and industry will develope those qualities in the soil which will make it suitable for all the crops growing in that region.

These are not exceptional cases. They are only samples of a large class which may be seen in every

land by any one who will study the actual world in which we live and not theorize about that hypothetical one which the Ricardians have invented. Even if the hill-sides are no longer cultivated it does not follow that they can be put to no use through which they will yield rent. They can be used for meadow or pasture, and in this way will give their owners a return much greater than their cost. Barren hill sides often produce the best forests and thus bring in a large revenue to their owners after the original forests of the country have once been exploited. On the continent of Europe may be seen many half arid stretches covered with forests and yielding large rents.

We must view the world not as suited for one crop alone, but as used for a great variety of crops, each section having some crop for which it is especially adapted. In addition to this each tract can be put to many uses, being more or less fitted to several crops. Suppose a given tract will yield five dollars an acre as rent from corn, four from wheat and three for rye. If some new land especially adapted to corn, was cultivated and the price of corn should fall, this land would not be abandoned, but would be used for raising wheat, and still return a large rent. Should the price of wheat fall through the cultivation of land better suited to wheat, rye would be cultivated, and still a fair rent would be secured. In this way it might be put to twenty different uses and yet never become no-rent land. It is also worthy of notice that poor land, even though it be a hill side, remains in this condition only through defective tillage. From all land certain qualities are taken by cultivation, and all land will soon become poor if these qualities

are not returned. The return of these qualities alone keeps the land rich, and no farmer would think of putting all his manure on his fertile valleys while he let the hill sides become barren. On the contrary, he would place most of it on the poor fields and thus in time equalize the fertility of his farm.

When we recollect how often mere sand hills have been changed into the most productive land, it will be seen that there is no reason why lands capable of tillage should go out of cultivation merely because of a fall in price of wheat after they have once been cultivated long enough to make them productive. It is wrong to think that land of the first quality can be added to those now cultivated, only by the draining of swamps or by irrigating canals. The sandy plains of Belgium and Germany have been converted, by scientific tillage, into as good land as has been obtained by draining the swamps of Holland or the bogs of Ireland. Their qualities are as permanent as those of the latter, nor would they go out of cultivation any earlier if the price of food should fall. Any land capable of tillage in which there exist no qualities destructive of vegetable life, can be made into good land if time be given and skill and care be used. If land remains poor land it is not from natural causes but from social conditions. Nature always tends to make land better; it is man alone that keeps or makes land poor. If man can find no use for hill sides, or half arid stretches, it is through some fault of his own. Upon such tracts can be cultivated many plants for which the plains are not fitted, and only where man is so ignorant as to desire but few articles of food will the demand for articles grown on the hill sides be so small that they

cannot be cultivated with profit. Hill-sides, however, can not be made into plains nor plains into hill-sides, and if man persists in consuming only the products of one locality, he must not blame nature that the rest of the world is of no use to him. We all can see how stupid were the old Egyptians when, after migrating from a mountainous region to the banks of the Nile, they persisted in erecting artificial mountains in which to bury their dead. Yet the waste of labor in this way is not greater than that of other nations, who, after a change in their natural conditions, persist in their old habits of eating and drinking, and endeavor, fruitlessly, to change hill sides into plains or the opposite, rather than to adapt themselves to their new conditions. Just as it was social and not natural causes that induced the Egyptians to erect the pyramids, so are those causes social and not natural which compel farmers on hill sides to compete directly with those of the plains. Nature will not change her laws to suit our notions, and if we persistently continue to demand articles of food for which our land is not well fitted, we should not endeavor to throw the responsibility upon nature by asserting that the presence of large tracts of poor land is the result of natural laws.

It is true that economics must take man as we find him. Yet it is necessary to analyze a given effect to see whether the cause lies in man, in nature, or in his social environment. If the greatest happiness of the individual comes from having a small part of a rare article the cause of misery does not lie in nature. Neither can this view of happiness be shown to be the effect of any physiological law. It must, therefore, arise from the complicated workings

of those social causes which obscure so many of the natural laws. Social laws may be as difficult to counteract as the natural ones. This fact, however, gives us no excuse for confusing the one class with the other.

It is important that the difference between rent produced by natural causes should be distinguished from rent resulting from social conditions. That there are, and always will be, some differences in soils, cannot be doubted. If the only rent which farmers had to pay was for differences in soil, the Ricardian formula would hold true, and there would be no-rent land. Rent produced by social causes, however, does not arise from any difference between advantages of one place over another, but from those social conditions which increase the competition for land in general; and when rent arises from these causes, there need be no no-rent lands. If the general social development of a country favors a low rate of wages and interest, and a diet limited to a few articles, the demand for land becomes so great that a large rent will be obtained from all land suitable for the cultivation of those crops which the people desire. It is, of course, possible, and in some stages of development probable, that there will be land paying no rent, but where rent is the result of social conditions, there is no connection between high rent and no-rent lands as is the case where difference in fertility is the sole cause of rent. Differences of situation are to be classed along with the social causes of rent. If there were no division of labor, and every thing were consumed on the spot where it was produced, there would be no advantages of situation. The concentration of labor at given points gives

greater advantage to adjacent tracts of land than to those more remote, but the advantages of the division of labor soon become so great that even the more remote tracts give to their owners a large income above the cost of labor and transportation, and thus all land becomes rent-paying land. In one respect rent derived from situation resembles that derived from differences of soil. It is like the latter distributed unequally among the landlords, those nearest to the markets getting the greater portion. It is, however, the distribution of a real gain to society—that gain resulting from the concentration of industries in few places—and when these gains become so large as greatly to exceed the cost of transportation to remote places all land becomes rent-paying land. The advantage of situation has no relation to any qualities of the soil. It arises solely from concentrated industry, and has no differences as a basis which would necessitate some land to remain at a margin of cultivation with only that return which would merely compensate the labor and capital employed upon it.

When all these social causes (low wages and interest, limited diet and concentrated labor) combine, the price of food is forced so high that all tillable lands yield a large rent to their owners. Even the poorest land has many uses from which much more can be obtained than the cost of the labor and capital expended. Capital, however, must be understood in the limited sense of the return for that portion of capital which must be annually replaced. If all capital expended in bringing land into cultivation were always considered as capital a large portion of the earth would never yield any surplus as rent. This

portion of capital follows the same laws as rent and should be considered as rent. As it is sunk in the land it becomes absorbed in it and cannot be withdrawn because the price of food falls; nor can it cause land to go out of cultivation if no return for it is received.

It is perhaps best to restate the view of rent which has been advanced and show the suppositions on which it rests, and the relation in which it stands to those more commonly accepted. The causes that raise rent are independent of those that raise wages and operate more quickly. The increase of rent depends upon those causes that increase the productiveness of industry. Every invention, every additional division of labor and every utilization of any new natural advantage increases that fund which is likely to be absorbed by rent. The increase of wages on the other hand depends on very different causes. It is determined by those laws which fix the standard of life in each nation. Before the laborers can share to any extent in the increased productiveness of industry they must be educated and their standard of life raised. This is at best a long, slow process, so slow that it takes centuries to accomplish results that could be brought about in production in as many decades. If rent depended upon the efficiency of production while wages depended upon education and improved consumption, the increase of rent would be fixed by the degree in which the increased efficiency of production outran the improvement in education and consumption.

The increase of rents is greatly assisted by the fact that the rapidity of the increase of efficiency of industry is determined by the progress of a few

centers of civilization while the increase of food and wages can be secured only as civilization permeates every quarter of the globe. English cities, for example, could produce enough commodities for the whole world, and with a rapidly increasing efficiency; yet the increase of land and the rise of wages cannot proceed rapidly while so many parts of the world develope but slowly if at all.

From the beginning of modern civilization the efficiency of production has increased much more rapidly than the improvement of the laboring classes and it is likely so to continue for many ages. As a result the fund to be distributed as rent absorbs the larger part of the gains of improved processes, and this fund will increase so long as the efficiency of production develops more rapidly than the standard of life among the laborers. Rent can be so high as to leave no no-rent lands so long as the present more rapid development of industrial processes continues. These causes raise the value of the produce of what would otherwise be no-rent land and make it yield a large rent and to a like degree increase the rent of the better land.

It is universally recognized that any commodity may have its value increased above its normal value. An unforeseen enlargement in the demand for cloth or iron makes its price rise above the normal cost almost every year. Ships, factories and other aids to production which take a long time to complete depart from their normal value for a much longer period than do commodities like iron and cloth. It is the same principle which in the case of land operates to raise the rent of all lands and to prevent any tract from remaining no-rent land. The dif-

ference is that the period through which the price remains above the normal value is greatly extended. Instead of for months, as in the case of cloth, or for years, as with buildings or ships, the rent of land remains for centuries above what the normal rent would be, if we measure normal rent by the differences of soil. In fact rent can almost be said to be raised permanently above its normal value so stable are the causes which make it increase more rapidly than wages. Only in the earlier stages of civilization have real rents corresponded to normal rents and it seems likely that in the final stages of progress they will again be the same, if we can hope for a final solution of our social problems which will make the real reward of each laborer the same as the average return for all labor. Until then, however, we are likely to have abnormal rents so high that no land will long remain at the margin of cultivation.

SECTION III.

THE MARGIN OF CULTIVATION.

The relation between no-rent lands and the margin of cultivation is so intimate that a discussion of the former would not be complete without a consideration of the latter and of the laws which depend upon it. According to the Ricardian system the land at the margin of cultivation measures the rent of all better land and at the same time determines the rate of profits. In estimating the truth of any Ricardian law we must always consider the hypothesis upon which it is based. Ricardo always supposes that wheat is the staff of life to the laborers and that all

land is used for its production. If these simple conditions were true, the laborers having but one kind of food for the production of which all land must be used, the deductions based upon the margin of cultivation would doubtless be beyond dispute. These conditions, however, never were wholly true and the continuous progress of many ages has developed so many different uses for land and so many kinds of food that so simple a criterion of rent and profits has but little value. Bread is no longer the staff of life in any real sense. Wheat growing has a very subordinate place in comparison with the aggregate of the food supply which is now produced and consumed. Yet in one way it has a place different from any other article of food. It is usually the first use to which land is put after it is brought into cultivation. This is because wheat is so much less perishable and has a much smaller cost of transportation than other agricultural produce. Around the industrial center of any nation we might draw a series of circles representing the different areas in which the various crops could be cultivated. In the section nearest the center the bulky perishable crops would be found while at the margin wheat would be grown. As the demand for food increased the area used for each crop would be enlarged, and as the crops at the center occupy more land the wheat, at the margin, would be forced upon new land still farther from the center. There is thus with the increase of population a series of changes in the use of land, from articles like wheat for which labor is least efficient to others like corn, root crops, and garden products for which labor is more efficient.

Suppose the best land when used for wheat produced thirty bushels an acre and that on the land

now used for wheat only twenty bushels could be raised. According to the Ricardian formula the rent of the best land would be ten bushels an acre. This would be correct if wheat was still cultivated on the best land. This land, however, is no longer used for wheat but for other crops for which it is more productive. The benefit of the increased productivity of the best land could not come entirely to the laborers upon the best land without giving them a higher reward than those received at the margin of cultivation where worse land is now in use. The rent of the best land must therefore rise above the value of ten bushels of wheat, the true rent if wheat were cultivated upon it.

For this reason the Ricardian law fails to measure the rent of land correctly. Good land must have a rent at least as great as the difference in its fertility for wheat from that of the land at the margin of cultivation. As soon as some other crop is produced on the land a still larger rent must be given and the rent can be as much larger as the labor employed upon it is increased in efficiency by the change of crops. Rents increase more rapidly than the margin of cultivation is lowered, and a knowledge of how much more productive for a given crop a certain field may be than is the land at the margin of cultivation affords no criterion by which its rent can be measured.

The same change in the demand for food destroys the relation between the margin of cultivation and the rate of profits. Ricardo sought to show that the rate of profits was high when all the cultivated land was very fertile, and that it was reduced as the margin of cultivation was lowered through the use

of poorer land. If the food supply consisted entirely of wheat or of any other one crop, the rate of profits would be reduced as land less productive for this crop was brought into use. When, however, a second crop displaces wheat on part of the land the same conclusion cannot be drawn. There is an increased productivity on the land where the second crop is raised to counteract the reduced fertility of the new land used for wheat.

The land of Northern Illinois was at first used for wheat. Being, however, much more productive for corn it was soon used only for the latter crop, while wheat was produced further west in Minnesota. Even if the land of Minnesota was less productive of wheat than that of Illinois, the inference could not be drawn that the general rate of profits is lowered. To lower the rate of profits the average cost of the whole food supply must be raised, and if the increased productivity of the land of Illinois for corn was as great as the increased cost of wheat in Minnesota the rate of profits would not be lowered in spite of the fact that the margin of cultivation was reduced. To allow the cultivation of wheat in Minnesota a higher price for wheat was needed but the gain from an extensive use of corn in Illinois makes the average return for agricultural labor no less than before and thus prevents a fall of profits.

With each extension of cultivation a similar change takes place. Land near the centers of commerce is put to new and more varied uses which increase the efficiency of labor employed upon it, while the cultivation of wheat is driven into more remote regions where the cost of cultivation is increased. This change necessitates a rise in the price

of wheat, but no inference can be drawn as to the change in the rate of profits because it depends not upon the price of wheat alone as Ricardo assumes, but on the average cost of all agricultural produce.

It is not the reduction of the rate of profits that allows the cultivation of poorer land for wheat. The lowering of the margin of cultivation comes from a more efficient use of the better land so that its tillers can pay more for wheat. Illinois farmers ceased to raise wheat and began to procure it from Minnesota not because their rate of profits was reduced, but because by producing corn their labor became so much more efficient that they could afford to purchase it, even at an increased cost. From the actions of farmers we can determine whether or not a reduction of the margin of cultivation for wheat arises from a fall of profits. When the farmers on the better land continue to raise wheat it shows that the rate of profits is lowered. If, however, they cease to raise wheat and procure their flour from the newer lands in exchange for their produce, it shows that they have found better uses for their land from which the gain is sufficient to allow them to pay a higher price for flour. A mere lowering of the rate of profits would not change the use of an acre of land. When a change is made in the crops there must have been a change in the relative cost of different crops. A better use for a farm must be found before it will cease to be used for a given article of food, which must in the future be obtained in exchange for the new crops.

From these facts it is evident that land at the margin of cultivation does not measure rent or determine profits when agricultural produce is composed

of a great variety of articles. Only when wheat or some other single article of food is consumed, do profits fall as the margin of cultivation is lowered. We must therefore resort to some other method to determine profits under the complicated conditions which exist in our present civilization. What the correct method is I shall endeavor to show in the following section.

SECTION IV.

THE GENERAL LAW OF DISTRIBUTION.

Of the factors necessary for production, that factor which tends to increase at the slowest rate, will reduce the shares of the other factors to their lowest possible limits, will have the benefit of all improvements and must bear all permanent burdens.

At the beginning of this section has been placed a law of distribution of great importance for a clear conception of the many intricate problems which arise out of the distribution of wealth. It is not given as a substitute for other laws explaining the same phenomena, nor with the expectation that by this means the whole topic may receive a ready exposition. Yet a new point of view often furnishes a clearer perception and a readier explanation of some complicated phenomena than can be obtained by any manipulation of old formulas. Those deductive principles of which so much use has been made in this department have advanced our knowledge in a remarkable degree along certain lines, yet they

cannot be said to have made the whole field as luminous as should be desired. Perhaps other principles, obtained from a different standpoint, will be able to throw light into some of the yet obscure corners and when they are brought into proper relation to prevalent doctrines it will become clear that they are complementary to those already known.

Wages and interest have usually been regarded as standing in direct opposition the one to the other. Whatever raises the one involves the fall of the other and between them they absorb the whole return for labor after rent has been deducted. I desire to have them viewed not as directly connected or as opposed to one another but in their relation to land and the causes which increase the supply of land, labor and capital. Each of these factors has its own rate of increase, and the causes which operate to increase any one factor are to a very large degree at least independent of those which tend to increase the other factors. From this point of view, to determine the share of a given factor, we must know its rate of increase and compare this rate with that of the other factors. The more rapidly increasing factors will find their shares of the whole produce reduced, while the share of the slowest increasing factor will be augmented by what the others lose. There is, therefore, no opposition in interest between the more rapidly increasing factors. Their interests are in harmony as against the more slowly increasing factor to which flows an ever increasing proportion of the whole return from industry. In any given state of industrial development and of civilization there is a certain fixed relation between the amount of land, capital and labor of which use can be made.

If more labor is to be employed, more land and capital must be utilized, and with the use of additional land or capital the proper addition must be made to the other factors.

The real increase of these factors must stand in a definite relation to one another, and if any factor tends to increase more rapidly than another there is no way by which this tendency can be sufficiently counteracted but by a reduction in the share of the produce to which it is entitled. The greater the difference between the tendencies of the two factors to increase the more must the share of the too rapidly increasing factor be reduced before the increase of the two factors will stand in proper relation to one another.

The truth of this point of view is doubtless most obscure in the relation of land to labor and to this, therefore, I shall devote especial attention. In every community population has a tendency to increase while the supply of food is limited. There is no effective way to check this too rapid increase of population except through a rise in the price of food. When the price of food rises the difficulties of supporting a family are increased while the means of obtaining support remain as they were. This change will induce many to rear smaller families and modify in other respects their habits and customs, or if the standard of life is low the death rate will be increased. If the growth of population is not checked at once so as to be brought into a proper relation to the food supply, another and another rise in the price of food will take place until the too rapid increase is brought under control. Were the supply of food absolutely limited there could be no increase of population and

the price of food must rise until the father and mother of each family could procure only enough food to support themselves and rear a couple of children to take their places when they died. The amount necessary to do this would vary in different nations, depending on the degree of their civilization and on the national industries. Some fixed amount there would be and this would be their standard of life. Under such conditions the price of food would be high where the standard of life was low and each would vary inversely as the other. Such conditions seldom or never arise in actual life since the land factor is constantly increasing though much more slowly than population. As a result the checks to population do not have to be applied so sternly to produce an equilibrium between the rates of increase of land and population, as would be the case if the supply of land was incapable of increase.

Although the possibility of enlarging the food supply reduces the pressure of population on the means of subsistence, it does not remove this pressure. The same laws remain in operation, though their action is obscured by the more complicated circumstances in which they operate. We shall, therefore, gain in clearness of conception if we consider them as operating under simpler conditions than we actually find them working under. By this means alone can a correct idea be formed of the tendency of each element, and of the real connection of each factor with any of the others which join with it to produce the combined result. Especially is there great need of an investigation of the connection between improvements in production and the standard of life among laborers. In other words do improvements in production have a tendency to raise the standard of life?

Improvements in agriculture are of two kinds: either less labor will produce the same amount of food, or the same labor will produce a greater amount. If less labor will produce the same amount of gain it will not change the price of food, as the supply and demand will not be changed. Less agricultural labor will be needed, and the owners of land will gain all that is thus saved, and they would have enough additional means to employ the labor thus freed in some other way. Should the same labor produce a greater amount of food there will be a change in the relation of supply and demand, and the price of food would fall. The checks to the increase of population, which were produced by the high price of food, would now be partially removed, and population would increase more rapidly than before, until a return of the former price of food reduced the rate of increase to its old figures. The fall in the price of food would be temporary, and the advantage to laborers would be limited to that age in which the improvement was made. All the ultimate benefit would come to the owners of that slowly increasing factor of production which absorbs an ever increasing share of all produce.

If improvements be made in any other department of production than agriculture, the articles improved will permanently fall in price, and, for a time, the benefit of the reduction in price may come to the consumers of these commodities. It will now be easier to maintain the standard of life, which the community enjoys than it formerly was, and consequently some of the checks to the increase of population will be removed, and population will begin to increase more rapidly than before. The price of food must rise to

check this too rapid increase, and it will continue to rise until it is as difficult to maintain the standard of life as it was before the improvement was made. There is no way to keep down the price of food except by so limiting the population that it will be a more slowly increasing factor in production than land is. This adjustment of population to the means of subsistence could have been effected before the improvement, if the right measures had been employed, but people would not use them. If they could, but would not do this before the improvement, there is no reason to suppose that they will do it afterwards. At least there is no direct connection between the two, and the benefits of such improvements are likely to come to the landlords through the rise in the price of food, which is sure to follow. Doubtless there are times when improvements in production are accompanied by a change for the better in the standard of life. There are, however, so many instances in which even the opposite is true, that the unprejudiced observer must conclude that the more favorable outcome is a mere coincidence, and that the causes raising the standard of life are not the same as those which are so rapidly bringing into use so many improvements in production.

The effect of an extension of cultivation by the use of more land is similar to that of improvements in land already cultivated. If large quantities are suddenly brought into use, the increased demand for labor and capital would raise wages and interest. These factors would now increase more rapidly than before, and in time the price of grain would be restored and wages and interest would be reduced to their old rates. There would now be more laborers and more

capital employed, and the newly employed lands would return the same rent per acre to their owners as had the older lands.

From these considerations we can perceive what are the permanent effects of all improvements and extensions of cultivation, so long as the rate of increase of land is less than that of capital and population. Every improvement enables these two factors to increase in amount, but the share of the whole produce that each unit of labor and capital receives, remains as before. The landlords are benefitted by having more produce to enjoy, if the improvement is in land, or by receiving a greater price for their produce if the improvements are in other departments of industry. This must be the ultimate outcome if there is no direct connection between improvements and the standard of life enjoyed by the mass of the people.

It has commonly been held that the cause of low wages and over-population lay in the law of diminishing returns, and if this law was false, there could be no such thing as an over-population. It is true, that without the limitations of this law, capital and population could go on increasing forever, yet there is no reason to suppose their rate of increase would be the same. If these rates were different the same evils would arise which we now perceive in nations limited by their present conditions. Overlooking the effects of the law of diminishing returns, suppose that capital tended to double itself in thirty years, while population doubled its numbers in twenty years. Wages would of necessity fall, and the reduction of wages would continue so long as the increase of population was more rapid than that of capital, or until

wages had fallen so far that the share of product coming to the laborers would be barely enough to support themselves and their families. Under these considerations all the benefit of the fall in wages, as well as that of the gains from improvements, would come to capitalists through an increased rate of interest.

On the other hand, suppose that under these conditions this rate of increase was reversed, and that capital tended to double once in twenty years while population did the same only in thirty years. The rate of interest would now continually fall and wages would increase in the same proportion, and all the benefits of improvements would pass into the hands of the laborers as an increase of wages.

If through this general law of distribution the most slowly increasing factor of production secures to itself all the benefits of improved production, this same factor must also bear all the permanent burdens of society, such as taxes. By permanent burdens, however, must be understood only those which have remained in force for so long a time that all industrial undertakings have become adjusted to them in contrast to those burdens which are imposed for a short time to meet some temporary emergency. When permanent burdens are first laid upon society the more rapidly increasing factors might be compelled to bear them for a while, but in the end industry would adjust itself to the new conditions in a way that would transfer the burden to that factor which had the slowest rate of increase. The force of competition is always strong enough to reduce the shares of the two rapidly increasing factors to the lowest possible limits to which they can be reduced, and

below these limits they cannot long remain. The lowest possible limits to which the share of any factor can be reduced is reached when its rate of increase is no greater than that of the most slowly increasing factor. If its share were further reduced this factor would become itself the most slowly increasing factor, and then its share would tend to increase until its former share was restored to it. How far then the share of any factor can be reduced depends upon the difference between its rate of increase and that of the slowest-increasing factor, and the greater this difference the greater will be the reduction of its share before its rate of increase will stand in proper relation to that of the slowest increasing factor. This slowest increasing factor becomes, therefore, the determining factor in production. The shares of the other factors are fixed at the lowest limits of which the conditions of production and civilization will admit. All the surplus due to improvements augments the share of the slowest increasing factor, and permanent burdens are of interest only to those who enjoy a portion of that produce which comes into the possession of the slowest increasing factor through the greater competition to which the other factors are subjected.

The doctrine that the burden of taxation must be borne by the slowest increasing factor in production, must not be confused with the claim that all taxation ought to be placed directly upon land. While land is the slowest increasing factor taxes will reduce rent even if placed upon classes not owning land. Under our social conditions, however, we cannot be sure that land will bear all the burden of taxation. There are many monopolies besides that of land, and as

they share in the surplus due to improvements, they cannot avoid, at least, a part of the burden of taxation.

There are several important causes which prevent a clear conception of the working of those laws by which the burden of taxation is distributed, and to these some attention must be given before we leave the subject. In the first place there is so strong a feeling against all taxation as to make the whole topic viewed from the standpoint of feeling, rather than that of reason. Most economists have so much confidence in the maxim that the best of all taxes is that which is the least in amount as to make it suit their ends to strengthen this prejudice against taxation rather than to develop, scientifically, the laws of its distribution. This procedure is especially favored by the free trade movement, whose advocates find their strongest weapon against tariffs in the deep rooted prejudice, which all men have, that the interests of their particular class are those which are most injured by high taxes. It is not likely that broader views on taxation should come from this direction, and as most of our deductive laws have been developed by writers of free trade tendencies, it is easy to see why taxation should not have received that development which has been given to other related topics.

The same group of causes tend to give an undue prominence to taxes upon labor and a desire to exempt these taxes from the working of general laws. It is usually deemed expedient to excite the prejudice of the laborer against them by impressing upon him the idea that all taxes oppress him and his interests much more than those of other classes; and in

the same way the feelings of those who have a sympathy for labor and its wrongs are so much excited as to preclude a possibility of an impartial discussion from that standpoint from which alone the working of the general laws can be traced and separated from the many complications which obscure the view. Through our feelings the effects of subordinate laws and temporary circumstances are so magnified that they seem to be the controlling elements, and with the attention riveted upon the ebb and flow of the many particulars, the whole domain of taxation seems outside the realm of stable law. Only when the fantasies of fear, aroused through prejudice, no longer distort the vision, can the conception of regular law be developed in taxation similar to those laws which have already been so clearly demonstrated in other fields of economic investigation. The reign of law is no longer denied in regard to the rate of interest, rent, cost of production, etc., and these subjects are treated from so objective a standpoint that the slowly working but permanent causes can be separated from those which are temporary and shifting. The rapid and extreme variations of the market price, for example, do not prevent the economist from recognizing the deeper though less evident tendencies which govern the normal price of commodities, nor should any one allow his prejudices or sympathies so to bias his mind as to obscure the equally evident laws regulating the distribution of those permanent burdens which now absorb so large a part of the revenues of every well organized society.

Yet another cause leading to the obscurity of those laws which it is my purpose to emphasize, lies in

the optimistic hopes of many who have an interest in economics. They love to dwell upon the great progress which the last century has made in production, and then without further investigation accept as an axiom that all the benefits of this progress pass quickly into the possession of the laboring masses. Any emphasis of the fact that the standard of life depends upon slowly working causes, independent of the progress in production, is sure to arouse the opposition of such persons. It takes away the basis of that easy solution of our social difficulties which makes progress in production the only serious obstacle to the rapid development of mankind in all our social relations. We should all, doubtless, be pleased if the laborers were the residual legatees of all the proceeds of industry, after the claims of other classes were adjusted; yet this hope should not blind us to such a degree as to render us unable impartially to investigate the possibility of the existence of many powerful tendencies which prevent so favorable a result, and cause the elevation of the laborer to be the work of centuries, instead of being, as we are likely to fancy, the outcome of a few decades of improved production.

It is perhaps necessary to present clearly the difference between the views of the law of wages, presented in this essay, and that of the so-called iron law of wages. This latter law asserts that wages can never be permanently higher than the amount it costs the laborer to live and propagate. The laborer is regarded as incapable of any real development towards a higher civilization, and as having such strong passions as to bring on a chain of events which will ultimately deprive him of any share in improved

production. Is there, however, no consistent middle course between the claim that the results of improved production pass easily and quickly into the hands of the laborer, and the other extreme, which asserts that all such results pass just as easily and surely out of his possession? It seems to me that there is such a way, and that many important facts make it evident, on one hand, that wages are determined by law, and on the other, that the law of wages has no direct connection with the causes improving production. A few individuals far in advance of their time have perfected all those processes which have so much increased the total income from industry. Were the mere possession of a large income a surety that it would be retained, we might predicate from the increase of the average return for labor that a fair share would come to each laborer. There are, however, many qualities of mind and body which must be strengthened before the actions of each man will so conform to the natural conditions around him that a better distribution of wealth is possible. These qualities develop but slowly, and have many powerful social tendencies which tend to counteract their growth. To so great a degree is the growth of these qualities retarded that often many generations must pass before their development becomes sufficiently marked to receive universal recognition. So long as the growth of economic qualities in man is so slow that many economists can discover little real progress towards a better man, it is hardly in place to claim that the condition of the masses will improve as rapidly as improved production will allow. Machines are much more easily and quickly improved than are men, and are subject to different laws. The causes

of improved production must, therefore, be independent of those fixing the standard of life and lead to an accumulation of wealth which will be much more rapid than is the progress in its distribution.

SECTION V.

SURPLUS REVENUE.

A proper application of the principles that have been discussed to the phenomena of distribution will secure a new point of view from which some of the intricate problems relating to value and the stability of prices may be freed from their complexity, and so presented as to reveal the simple working of fundamental laws. It has been shown that the share of the whole produce which each factor in production acquires, depends upon its relative rate of increase, and that the conditions determining the rate of each factor are distinct and independent of those of the others and do not stand in any fixed relation to improved production. From its peculiar conditions, production goes on developing at a rapid rate and has already augmented the aggregate wealth of mankind, and the produce suited for distribution to many times the amount which our forefathers had for production or distribution. Yet the standard of life which determines the rate of wages, has developed much more slowly than it could have done, had it been determined directly by the progress in industrial processes, and risen as rapidly as the produce obtained from production has increased. During the same time, the rate of interest which shows the share which the capitalist obtains from the aggregate

produce of labor, has not increased at all; on the contrary, no one event is more patent, than that this share has been constantly declining, leaving us a rate of interest so low, that our ancestors would have deemed it incredible that any one could be induced by such a rate to use productively the savings transmitted from the past, to say nothing of the immense additions which are annually accumulated at this low rate. While these facts remain true, the shares of labor and productive capital, must absorb a smaller relative part of the aggregate produce of industry, than they did in former times when labor was less productive. Into some other hands must a large fraction of the wealth, resulting from improved production have fallen, and we should endeavor to trace it and discover who has become its lucky possessor.

Could the ultra-Ricardian view of rent be accepted, the ready answer might be given, that it has gone into the purses of the land owning classes to swell that ever increasing fund, which comes to them without work or forethought. This result would doubtless follow if the former conditions of agriculture were still in force and a large body of land lay at the margin of cultivation, to hold the price of agricultural produce high and firm. But when these lands are once so much improved as to demand for their continued cultivation, only a fraction of that price for food which was needed for their first cultivation, it is no longer safe to predict that the price of food will remain so high, that rent will absorb all the produce left, after the shares of labor and productive capital have been deducted. A hundred good farms by themselves, have no lever by which an increasing

share of produce can be drawn into the possession of their owners. They have not even any means to protect the return for the capital sunk in their improvement. Only the presence of poorer lands, gives any natural protection to the owners of better lands, whereby their rents will be secure. Give them neighbors toiling among the rocks and swamps, and they may rest at ease and see their unearned share increase by rapid strides. Change these poor lands into good ones, or put them to some other use for which they are better fitted, and these unearned rents and the idle landlords who enjoy them, would vanish much more rapidly than they came, if, at least, they depended upon nature alone for protection. And what protection, other than the natural ones, can the possessors of high rents find, after their poorer neighbors have conquered the obstacles to cultivation which made their fields have a high cost of production? The natural stability of a high price for food, would be destroyed by this change, and social conditions might reduce the share of rent to a minimum, just as easily as they could the shares of labor or capital. Indeed, land would now be on the same footing with the other factors of production; its possessors would be sure of only a minimum, arising from those slight differences of soil which skill and capital cannot remove. More than this amount farmers might get at times, but it would come from tireless energy and not from listless indifference.

After the natural protection insuring high rents is withdrawn, or even in an earlier stage of progress where it is withdrawing and prices are becoming less stable, the distribution of the aggregate produce of

industry must be different from what it was in the earlier stage of progress when the price of agricultural produce was high and secure. Then wages and interest were at a minimum, and rent absorbed the remainder. Now rent as well as the other factors, has a minimum to which it must tend to conform. The sum of the secure income of all three classes will no longer equal the aggregate production of wealth, but there will be a surplus revenue whose possession will be uncertain. I do not say that the total revenue of the three classes will not absorb all the produce of industry. This might be a fact, and yet the sum of the secure income of the three classes might be much less than the total production. The secure income of each class is determined by those slowly working causes which fix its rate of income and form a minimum below which its share cannot be reduced for any length of time, so long as the conditions of production and consumption remain unchanged. The surplus revenue is formed by a more rapid progress in production than in the development of those conditions by which the standard of life is raised. The margin between the total produce of industry and the amount of income secure to all the factors in distribution, increases with every stride in improved production, and forms an important factor in distribution as soon as the stability of agricultural prices is seriously undermined by the reduction of the quantity of poor land at the margin of cultivation. When this period has arrived the aggregate produce of industry is divided into two portions, each of which is distributed by the operation of its own peculiar laws. The secure income of each class depends upon those slowly operating causes which fix the rate of

increase of each class, and which effect changes in the social environment steadily and constantly, yet often so imperceptably, that many economists mistake the effects of our surroundings for a part of human nature itself, and imagine that the leading characteristics of man in the present social conditions, will remain as permanent as the laws of nature which limit his actions. The conditions which determine the distribution of the surplus revenue lie in the temporary circumstances which control the industry of each month or year. Each factor struggles for the mastery, and first one factor and then another finds itself in a position where it can secure the larger share of this undetermined portion of whole revenue. Any slight change in the state of production or commerce may so alter the conditions as to make a material modification in the manner in which this fund is distributed.

Just as in prices we recognize two distinct sets of causes affecting values—the one set shifting and temporary determining market values, the other constant, slowly working, yet all-powerful fixing normal values—so in distribution we must admit the presence of a double set of causes, each of which furnished the conditions through which a certain portion of the aggregate revenue of industry is distributed. In fact there is the closest vital relation between these two double sets of causes. The causes which determine normal values correspond closely to those which fix the share of secure income which each class possesses, while the causes which determine market values also have a vital connection with those which distribute the surplus revenue.

The increase of this surplus revenue, enforced by the conditions of production on a large scale, furnishes

the main causes which make present prices so unstable. Were the income from all industry just sufficient to furnish the minimum needed to keep in activity the necessary factors of production, prices of commodities would be held stable by the direct action of those laws which determine normal prices. On the other hand, had we an industry producing on a small scale, there would be as many different sorts of production as there were producers. With every fall in price some of the more inefficient producers would be compelled to cease production, and through the decrease in the supply of commodities the fall in price would soon be checked, and thus its stability would be secured. Production on a large scale places all producers on so equal a footing that no one closes his works until all of them are producing at a loss. The change to a production on a large scale produces similar results on the stability of the price of commodities that the transformation of poor land into good land has on the stability of the price of agricultural produce. High profits and steady prices for efficient producers are obtained only through the presence of less efficient neighbors, and whatever causes displace entirely these persons working at a disadvantage, take away that natural protection to stable prices which our ancestors enjoyed and leave a large portion of the annual produce of industry without any firm, steady conditions to determine into whose possession it shall flow. Like a river passing through the delta at its mouth, any slight obstacle may change the course of its distribution and leave its happy possessors of to-day in a muddy basin of despair to-morrow. Again, just as the value of a river to navigation depends not upon the total

flow of water along its course, but on the regularity of its flow and the stability of its bed, so the prosperity of a country is determined not by the aggregate produce of industry, but by regular production, stable prices and uniform distribution. Industry which does not conform to these conditions is not a blessing and may easily be one of the worst curses with which a nation could be afflicted.

SECTION VI.

SOCIAL CONDITIONS MAKING PRICES STABLE.

It would not be correct to conclude that because the natural conditions keeping prices stable are disappearing that the surplus revenue remains without any conditions determining its distribution. As soon as the natural causes operating in the environment of man cease to act beneficially and no longer supply the proper conditions for his development, there begin to arise in his social relations new causes which take the place of the natural ones and furnish a new basis for further progress. Nations gradually and unconsciously begin to make social changes to conform to new conditions just as soon as nature withdraws her protection by throwing them into new environments devoid of external security. Just as the development of our present means of shelter and clothing arose from the migration of man from semi-tropical regions where nature supplied the conditions for warmth, to more northern regions devoid of these conditions, so with any new transformation we must expect to see springing up some new social arrangement by which the evils resulting from the

decrease of natural protection can be averted. We are now just beginning to adjust ourselves to that lack of natural protection which has in the past made prices stable, and along some lines enough progress has been made to reveal what industrial modifications are likely to supply us the means for stable prices and further progress.

During the period of small production cheapness or the power of underselling was the determining factor in deciding which of the many producers should survive. The public sought exclusively those places where the cheapest articles were to be had and no other factor was of any moment in deciding where a purchase should be made. Buyers always sought the sellers and thus no expense of selling kept any consumer from obtaining any article at its lowest cost of production. Such conditions must always prevail where the produce of industry is barely sufficient to furnish the necessary minimum to the various factors of production. Cheapness must then become prominent and other considerations lose there importance and significance. With the rapid increase of productive power subsidiary influences gain in importance and the power of underselling to a large degree ceases to determine directly the actions of buyers. Now sellers begin to seek the buyers in various ways and find it more advantageous to attract the attention and excite their feeling or prejudices at a considerable cost than to win their trade through a mere appeal to cheapness. Formerly the whole attention of the producer was devoted to efficient production. If the production was efficient the sale of commodities came of itself, and the arts of the salesman were of no avail against the differ-

ence of a penny on the price. Now the importance of the salesman is supreme. More attention is probably now paid to the art of selling than to efficient production. This is shown by the larger salaries which efficient salesmen get in comparison with those that factory superintendents obtain. In most large establishments for each man employed in directing production a half a dozen will be found occupied exclusively with the purchase and sale of products, and the latter class will also have the larger salaries.

The extensive use of advertising illustrates the same tendencies. There are doubtless kinds of advertising which increase the cheapness of commodities yet this result cannot be claimed for the mass of those artifices by which the attention of the buyer is distracted from the real merits of the article, and which make some side-issue of more weight than cheapness or real worth. In every little village hundreds of dollars are expended annually to tell the people that tea and sugar are to be found at the grocery store, nails at the hardware store and beef at the meat market. Even so common an article as dairy salt can no longer be sold without extensive advertising, and the tons of printed matter which extol the merits of different kinds of soap and baking powder tell only too plainly how small a factor real cheapness is in the estimation of the average citizen. In some cases, agricultural implements for example, the selling price is often double the cost price and frequently manufacturers withdraw agencies from dealers because they have sought to attract trade by underselling the schedule prices. In many trades there is a tacit understanding that buyers must not

be attracted through reduced prices, yet each firm may advertise to any extent, send out agents or resort to any other costly means to increase their sales. Think again of the immense addition to the first cost of most commodities which the prevalent use of commercial travelers occasions. The hotels of even the smallest villages are overflowing with these solicitors for trade, and who can be so deceived as to think that this form of selling increases the cheapness of commodities?

Wherever the simple ways of our fathers are departed from and the seller seeks the consumer, an entering wedge is secured through which higher prices become substituted for the lower. With the attention once diverted from cheapness and equality there seems no limit to the divergence of the selling price from cost. The art of selling does indeed require great skill and is a worthy study, but it is a study of human weakness and not of human strength. Nothing could reveal more plainly the weak side of mankind than the great success of the many artifices to which sellers resort to find a market for their wares. Of course they talk ceaselessly of cheapness and quality yet, whoever listens must pay dearly for it.

When buyers are influenced in their purchases by feeling and prejudice and a thousand other circumstances to which sellers must appeal there must be a great addition made to the cost of commodities. A higher range of prices is thus substituted for a lower, and a degree of stability is acquired through the absorption of the surplus revenue. Yet it is a stability founded upon waste leaving the mass of the people in a condition not much better than if produc-

tion had not been improved. It is, however, the first stage, the social development towards stable prices after the natural conditions for this end have been displaced, and by clearing the way for a better adjustment it forms an important epoch in social progress.

Stable prices, it is well to keep in mind, mean high prices as soon as the natural conditions determining prices are displaced. The fierce competition which reduces prices meets no obstacles counteracting its tendencies until all the producers produce at a loss. The great similarity of the conditions under which each producer on a large scale operates gives no one of them sufficient advantage over his competitors to enable him to compel them to discontinue production without placing himself under conditions that will destroy his own profits, or, if he and they are both well supplied with capital, prices may fall far below the cost of production and remain there until those interested have wasted their capital in useless endeavors to get some advantage over their rivals. With no natural limits setting bounds to competition some social restraints must be found, and the endeavor to do this has led to the formation of trusts and other similar combinations which fix limits to the downward tendency of prices. As such combinations to insure success must be bound together by the strongest of ties, it is merely the natural outcome of success that when the conditions are secured by which prices can be restored to a reasonable height the same influences would induce a successful combination to force prices still higher, even to that highest point where an additional price would cause a rapid decrease in the consumption of the products.

of the combination. This highest point would be reached when all the surplus revenue was absorbed. Any further advance would set in motion a series of events which in time would react against the combination and reduce its profits. The real standard of life of a people is fixed by conditions too permanent and powerful to be modified or reduced by any combination or set of combinations that producers can devise. They may by shrewd concerted action secure for themselves the greater part of the advantage arising from improved production, but the working of natural laws fixing the permanent shares of the different factors of production is not so easily set aside as to enable even the best matured schemes to be successful in making a radical change in the distribution of wealth. Slowly, yet surely, the social environment of man is creating a higher standard of life, but in the mean time the more rapid progress of production increases that surplus revenue which is sure to fall into the hands of those who can present the strongest combinations.

The social conditions favoring the growth of combinations are now so active, and so likely to cause them to increase both in number and in firmness of organization, that it is worth our while to investigate with care what will be their effect on the distribution of wealth, and also whether or not they are to be regarded as a necessary stage in our progress towards stable prices and further social development.

In regard to the changes in the distribution of wealth, it is probable that the land-owning classes will be those most affected. Without any organized opposition on the part of producers, the mere operation of natural laws would give the greater part of

the results of improved production to land-owners through the rise in the price of food which the active competition among individuals produces. Free competition creates a low price for commodities and a high price for food. Restricted competition reverses this and causes a high price for commodities and a low price for food. We have then two different social states to compare from whose characteristics we must decide whether the probable change from one to the other will be productive of any good.

To make a valid comparison, however, it is necessary to overlook the temporary effects which such a change brings about. The necessary transformation introducing any new system creates hardships which demand consideration and even compensation, but these evils should not prevent an innovation which is a step towards a higher social state. The evils arising from combinations to raise prices are most visible when first formed. On the one hand the means used often violate the rights of innocent parties, taking large masses of wealth from its rightful owners and giving it to the successful organizers of the combination. On the other hand the recipients of the benefits of the combination are likely to be few in number, and hence with each new successful trust we have a large concentration of wealth in a few hands. These facts show some of the evils of the change to a new system; yet bad as they are they should not prevent us from seeing the ultimate effects which show themselves after industry has adjusted itself to the modified conditions, and the shares in these combinations have become distributed through the community like other wealth.

Suppose that the capital invested in a given factory yielded a net revenue of \$50,000 while competi-

tion was free, and that through a trust the net revenue was increased to \$100,000. Should the conditions favoring the combination prove permanent, the market value of the stock would double in value, and the ultimate outcome would be the same as if double the capital were required. If a similar combination were formed in every industry with like success, the result would be the same as if twice the amount of capital was now needed that formerly was. Now whatever tends to increase the capital of a nation tends to develop those qualities in man upon which the accumulation of capital depends. There would be a larger proportion of the population than formerly of those who saved, and in them the necessary qualities would be more developed. This would be a great gain, and would doubtless tend to produce a better social state than the one it preceded. All monopolies change the distribution of wealth so as to increase the benefits of saving. Incomes from this source as well as from the rent of land cannot justly be regarded as a permanent loss to society.

The rise in the price of commodities and the accompanying fall in the price of food would reduce the value of farms, or at least prevent a rapid rise in their value. It is therefore a pertinent question whether it would be more beneficial to the community that the surplus revenue, above the necessary minimum which the natural laws give to each class, should go to landlords or to stockholders in industrial combinations. In one of these two ways it is likely to be distributed for a long time yet, however great may be the popular desire that progress should take us along other lines of development. It is probable that we have had about all the development

that can be hoped for from a high price for land. Improved farming depends upon intelligent farmers and stable prices much more than on uncertain though high prices for agricultural produce; and intelligent farmers are more likely to be found where land brings a moderate price than where the price of land is so high as to compel a separation of landlord and tenant into two distinct classes.

On the other hand there are several distinct gains to be obtained from a tendency towards combination. Stable prices are a necessary condition of social progress, and no other means seem now available by which they can be recovered. The opposition to trusts owes its origin much more to dislike of high prices for commodities than to a love of free competition which the trust destroys. People forget that real progress is conditional upon a change in the relative values of certain classes of articles by which the price of commodities will rise in value at the expense of agricultural produce. A manufactured article contains much more labor in proportion to its value than does a bushel of wheat or a pound of meat. Any real progress will adjust the value of these articles more closely to their cost in labor and thus carry us along the same road which the formation of trusts takes us. We must ultimately accept this change in values and bring our feelings into harmony with it, even though we prevent that progress towards stable prices which can be secured through trusts and combinations.

Any solution of the labor problem involves the difficulties which a combination of capitalists must overcome to be successful. A higher range of prices for commodities needed to secure a reasonable re-

ward to laborers necessitates that some limitation to competition be enforced, even in a social state where wages reach the highest limits which production will allow; and if private interest will solve any of these problems the experience thus gained will be invaluable when the time arrives for society to be reorganized on another basis.

Stable prices and regular employment furnish better conditions for the development of the higher qualities in man than does a rapid improvement in production coupled with the present dominant evils. Stocks and bonds of stable industries would give a much greater inducement for laborers to save than most of the investments which are now offered, and the increased interest in his work which such investments would give would add largely to the efficiency of labor. Every laborer should have an opportunity for a safe investment in the industry where he is employed, but this opportunity cannot be offered so long as unstable prices make such investments uncertain.

The diversion of the surplus revenue from the landlord classes to corporations would also be advantageous from the fact that the latter are much more subject to the popular and moral tone of the nation than are the former class. Should the price of land in this country rise to five hundred dollars per acre, it would be looked upon by the public as the natural outcome of our progress, and the greater part of the people would doubtless regard the rise in value as a sign of prosperity, and hence no effort would be made to secure a better distribution of wealth. Should, however, one-fourth of this sum come into the possession of a series of trusts as a

result of a successful combination, the whole people would be aroused, and the agitation would not cease until some better solution was discovered. The very fact that the popular dislike of trusts is so much greater than that of landlords makes it much more probable that the success of trusts will lead to real social progress than will the continuance of present tendencies towards the increase of the value of land. So long as farmers continue to regard their prosperity as coming from high prices, and not from stable prices, they form an almost insuperable barrier to a better distribution. Should a series of trusts prove stronger than they and wrest from them a large share of the surplus revenue they now enjoy, they would be soon educated to see that their prosperity is dependent upon the same conditions as the other industrial factors; and they would be willing to co-operate with other classes for the furtherance of those measures which will give both stability of prices and a higher standard of life.

If this point of view should prove to be valid, it may be that the present powerful tendencies to form trusts, will form a second stage in our development toward stable prices.

In the first stage, we saw that the surplus revenue is largely wasted by the tireless endeavors of the sellers to attract the attention of buyers, and to receive their trade at any cost.

The second stage will be one of economy. The activity of the salesman will be reduced to its proper limits, and more of the best talent will be directed towards improving production. In this increased economy the public may have only an indirect interest,

other than the benefits derived from more stable prices; yet through such a development, the foundation would soon become apparent on which a better industrial system could be laid. If the laborers become convinced that there is no direct connection between improved processes and increased wages, and the farmers become conscious that they are not always the sole recipients of the surplus revenue, which better industrial methods originate, both classes will be more willing to coöperate and to enforce those measures, which alone can raise the standard of life so high that there will be no surplus revenue for any class or combination to absorb.

Antecedent to any considerable progress along the most available lines, there must be a general recognition of the narrow limits within which political action can be of any avail. In spite of the assertions of Mill and our orthodox friends to the contrary, the distribution of wealth is to no greater degree a matter of human institution, than is its production. It is no more true, that a people can directly change the distribution of wealth without decreasing the amount to be distributed, than that they can change the ownership of the capital without effecting production. Laws to divert the incomes of one class into the possession of another are usually much more efficient in retarding progress along its only possible direction, than they are in securing the ends for which they were designed. The only efficient action which a people can take, consists of public measures promoting a higher standard of life; at least it may be said, that efforts along this line are less complicated and more likely to secure the desired end, than are direct endeavors to change the distribution of wealth.

With the appreciation of this fact will begin the third stage in our progress toward stable prices. The desire for a higher standard of life will be consciously coupled with the presence of a large surplus revenue, and the latter will be used as the means to secure the former. Taxes can be made just as efficient in securing stable prices as can any monopoly, whether of land or capital. If the gains caused by the rapid progress in production were more largely absorbed by taxation the operation of natural laws would regulate the distribution of the remaining produce of industry and thus keep prices stable. Taxes should therefore stand in a direct relation to the surplus revenue which makes prices unstable, and not be limited to the lowest minimum that the *laissez-faire* conception of government would allow. A high rate of taxation, when used economically to further public ends, raises the standard of life by furnishing the conditions needed for a wholesome regular social progress. A well organized system of public instruction, public parks, cheap, yet elevating, places of amusement, good public roads in the country, and an efficient system of drainage and sanitation in the cities, are worthy of mention as objects for which surplus revenue could be expended to a greater public advantage than that which is, at present, secured by leaving it to be absorbed by the strongest combinations which shrewd men can devise. We have passed beyond those primitive conditions in which an increase of taxation necessitates a decrease of that portion of the produce of industry which the average individual enjoys, if the sources of national revenue are taxed, and not the income of individuals.

The best of taxes are those which take a portion of the undistributed revenue of the nation. It then reduces the advantage to individuals of improved industrial processes, and falls upon those persons or combinations who would have obtained the increased produce, if the public had not, by taxation, forestalled them. Should the increased taxes of a given period be laid upon the undistributed revenues of the whole nation, and be no greater in amount than the gains from improved production during the same period, the share of no individual would be reduced. The remaining revenues of the nation would be distributed by the same laws, and in the same way as if no improvements had been made, and each individual would receive the same amount that he previously enjoyed.

It would be an especial matter of regret if old taxes to which the natural industries have become adjusted should be reduced from the mistaken notion that such a reduction would increase that portion of wealth which finds its way into the possession of the common people. A reduction of this nature would act in the same manner that improved production does. The same classes which absorb the gains of improved production would also acquire the benefit of reduced taxation and leave the mass of the people in exactly the same condition that they formerly were. It needs a great faith in natural laws to hope that under present conditions any considerable share of these reduced taxes would ever get a chance to fructify in the pockets of the people in the way our grandfathers supposed they would. A far wiser plan would be to retain the taxes and use them to promote public ends, at

least so long as the workings of economic laws do not tend to a harmonious development of the whole man. Unless the united efforts of the nation are directed towards strengthening those qualities in man which lie dormant under the reign of individual selfishness, we cannot expect that development in man which will relieve us of our present evils. Public revenues are much below what is needed for these ends, and a further reduction would be fatal to the realization of higher ideals, without even the compensation of an individual prosperity.

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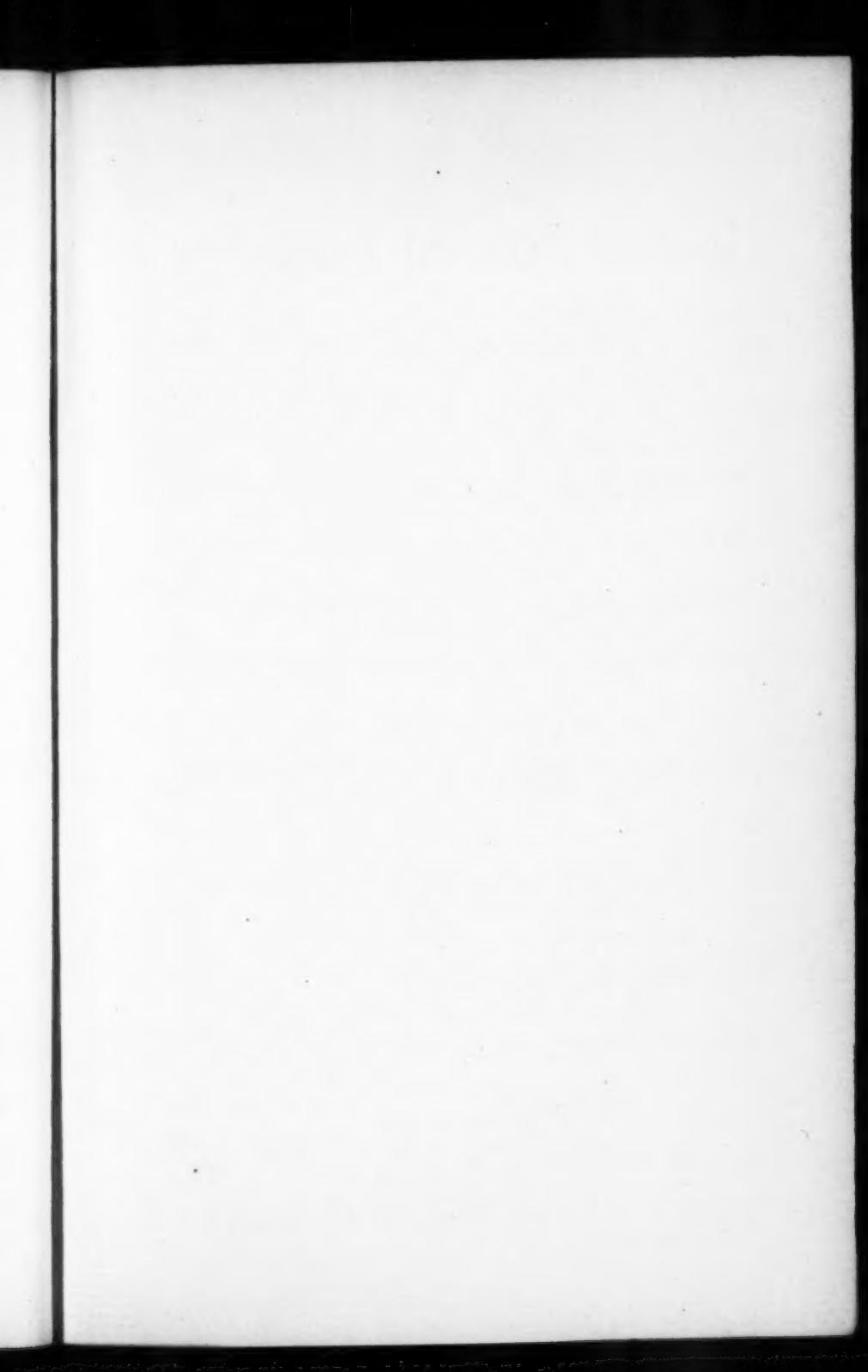
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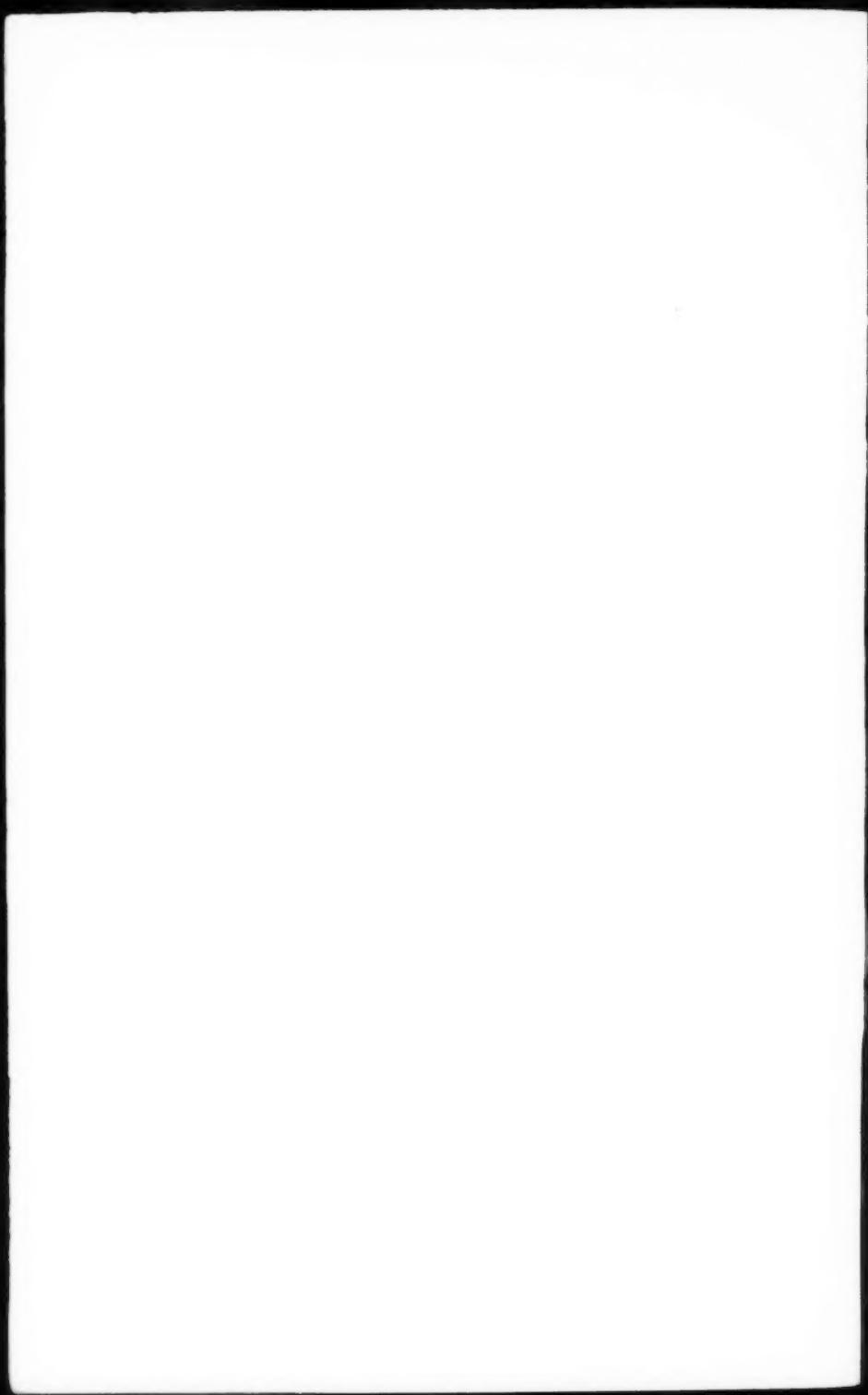
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